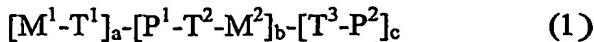


CLAIMS:

1. A compound of formula (1)



or a salt thereof,

5 wherein

M^1 and M^2 are the same or different and are each a metal coordination complex, wherein at least one of M^1 and M^2 is capable of interacting with a major groove or minor groove of a polynucleotide;

P^1 and P^2 are the same or different and are each a pyrrole-imidazole polyamide;

10 T^1 , T^2 and T^3 are the same or different and are each a linker group;

a is 0, or 1;

b is an integer selected from 1, 2, 3, 4 and 5;

wherein when b is an integer greater than 1, each P^1 , each T^2 and each M^2 may be the same or different; and

15 c is 0, 1 or 2; wherein when c is 2, each P^2 may be the same or different and each T^3 may be the same or different.

2. A compound according to claim 1, $a = 0$, $b = 1$, and $c = 0$.

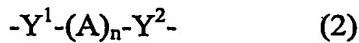
3. A compound according to claim 1, wherein M^1 and M^2 are the same or different and are individually selected from a platinum complex, a palladium complex, a 20 ruthenium complex, and a rhodium complex.

4. A compound according to claim 1, wherein M^1 and M^2 are independently selected from cis - $\text{Pt}(\text{NH}_3)_2\text{Cl}$ and trans - $\text{Pt}(\text{NH}_3)_2\text{Cl}$.

5. A compound according to claim 1, wherein each pyrrole-imidazole polyamides (P^1 , P^2) independently comprises a plurality of heterocyclic rings selected from the group consisting of optionally substituted N-methylimidazole (Im), optionally substituted N-methylpyrrole (Py) and optionally substituted 3-hydroxy N-methylpyrrole (Hp).

25 6. A compound according to claim 5, wherein each pyrrole-imidazole polyamide independently comprises 3 heterocyclic rings or 4 heterocyclic rings.

7. A compound according to claim 1, wherein the linker groups (T^1 , T^2 , T^3) are the same or different and each has the formula (2):



wherein

Y¹ and Y² may be the same or different and are independently selected from NH, -NH₂, C=O, C=S, C=NH, O, OH, S, SH, S(O), S(O)₂, NR³, NHR³, N(R³)₂, an optionally substituted cycloalkylamine, an optionally substituted cycloalkyldiamine, and an optionally substituted heteroaryl group (e.g., an optionally substituted N-heteroaryl group such as pyridyl, phenanthrolinyl, 2,2'-bipyridyl); where each R³ is independently selected from alkyl, cycloalkyl, aryl or heteroaryl;

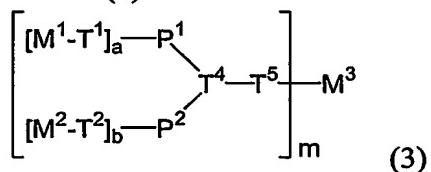
A is selected from an optionally substituted C₁₋₁₀ alkylene, an optionally substituted C₂₋₁₀ alkenylene, an optionally substituted C₂₋₁₀ alkynylene, an optionally substituted C₃₋₆ cycloalkylene, an optionally substituted C₆₋₁₀ aryl, C=O, C=S, and C=NH, NH, O, S, NH₂, OH, SH, S(O), S(O)₂, amino acids, and spermidine; and

n is an integer selected from 1 to 20,

wherein when n is an integer greater than 1, each (A) group may be the same or different.

8. A compound according to claim 7, wherein each linker group independently comprises a group selected from -NH-(CH₂)_n-NH₂-, -NH-CH₂CH₂CH₂-O-CH₂CH₂-O-CH₂CH₂-O-CH₂CH₂CH₂-NH₂, -NH-C(O)-CH₂CH₂-NH-C(O)-CH₂CH₂CH₂NH₂-, -S-(CH₂)_n-O-(CH₂)_n-S-, or -NH-(CH₂)_n-O-, and -C(O)-NH-CH₂-C(O)-NH-CH(CH₂SH)-C(O)-NH-, where n is an integer from 1 to 20.

9. A compound of formula (3):



20

where

M¹, M², M³ are the same or different and are each a metal coordination complex as defined above for M¹ and M² of formula (1), wherein at least one of M¹, M² and M³ is capable of interacting with a major groove or minor groove of a polynucleotide;

25

P¹ and P² are the same or different and are each a pyrrole-imidazole polyamide as defined above for formula (1);

T¹ and T² are the same or different and are each a linker group of formula (2) as defined above for formula (1);

30

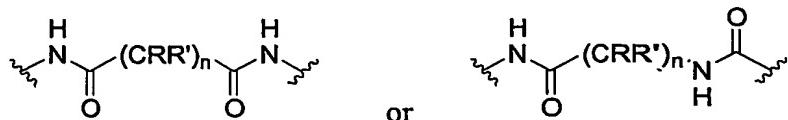
T⁵ is a linker group of formula (2) as defined above for T¹ and T² of formula (1), wherein one of Y¹ and Y² is bound to a metallocomplex M³ and the other of Y¹ and Y² is covalently bound to T⁴;

T^4 is a linker group of formula (2) as defined above for T^1 and T^2 of formula (1), wherein Y^1 is covalently bound to a pyrrole-imidazole polyamide, Y^2 is covalently bound to a pyrrole-imidazole polyamide, and wherein one Y^1 , Y^2 and A is covalently bound to T^5 ;

- 5 a and b are independently selected from 0 and 1; and
 m is 1, 2, 3 or 4.

In one embodiment, T^4 is covalently bound to T^5 via A.

10. A compound according to claim 9, wherein m is 1 or 2.
 11. A compound according to claim 9, wherein a = 0, b = 1, and m = 1.
 12. A compound according to claim 9, wherein T^4 comprises



wherein n is an integer selected from 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10,
 each (CRR') is independently an optionally substituted alkylene; and
 15 wherein in one (CRR'), R' is absent and CR is covalently bonded to T^5 .

13. A compound of formula (5):

$$[P^1]_e-[T^1-P^2]_f-[T^2]_g-M^1 \quad (5)$$

or a salt thereof,

wherein

20 P^1 and P^2 are the same or different and are each a pyrrole-imidazole polyamide as defined in claim 1;

T^1 and T^2 are the same or different and are each a linker group as defined in claim 1;

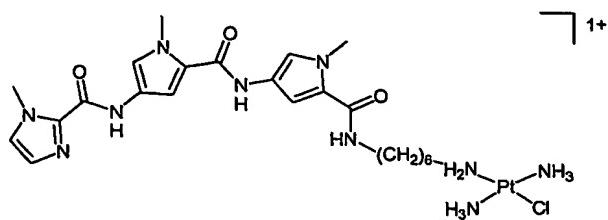
e is 0 or 1;

25 f is an integer selected from 1, 2, and 3; wherein when f is an integer greater than 1, each T^1 and each P^2 may be the same or different;

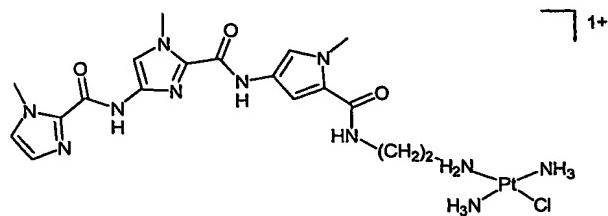
g is 0 or 1; and

M^1 is a metal coordination complex capable of interacting with a major groove or minor groove of a polynucleotide as defined in claim 1.

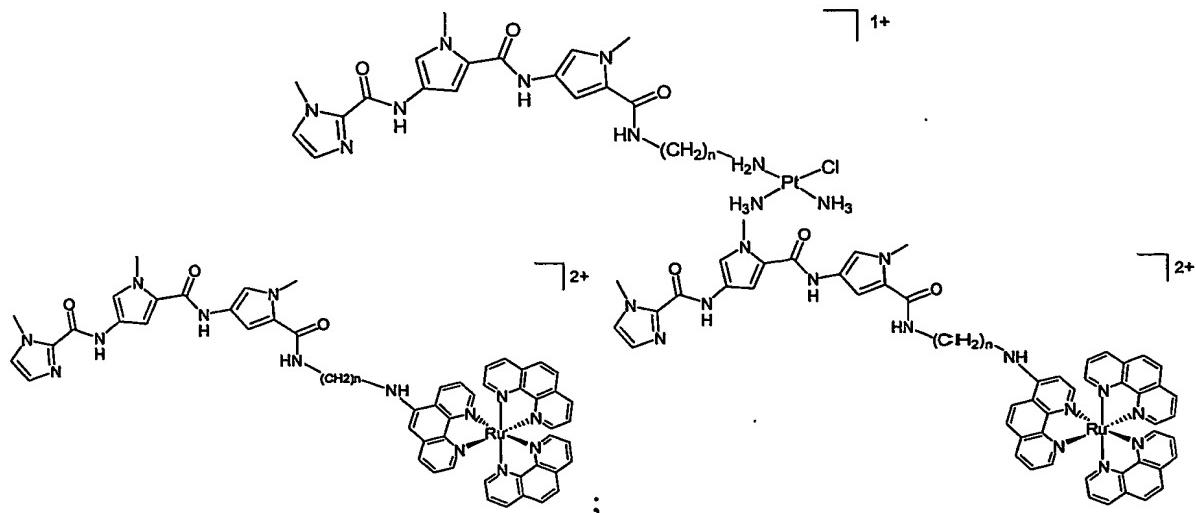
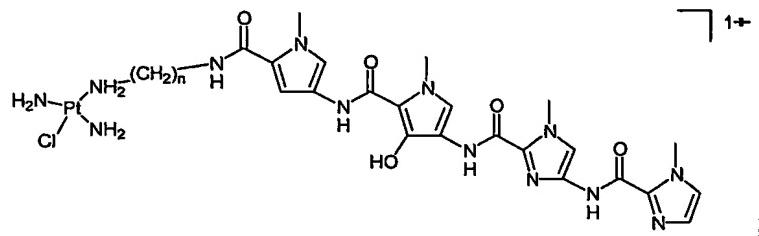
30 14. A compound according to claim 1, wherein said compound is selected from

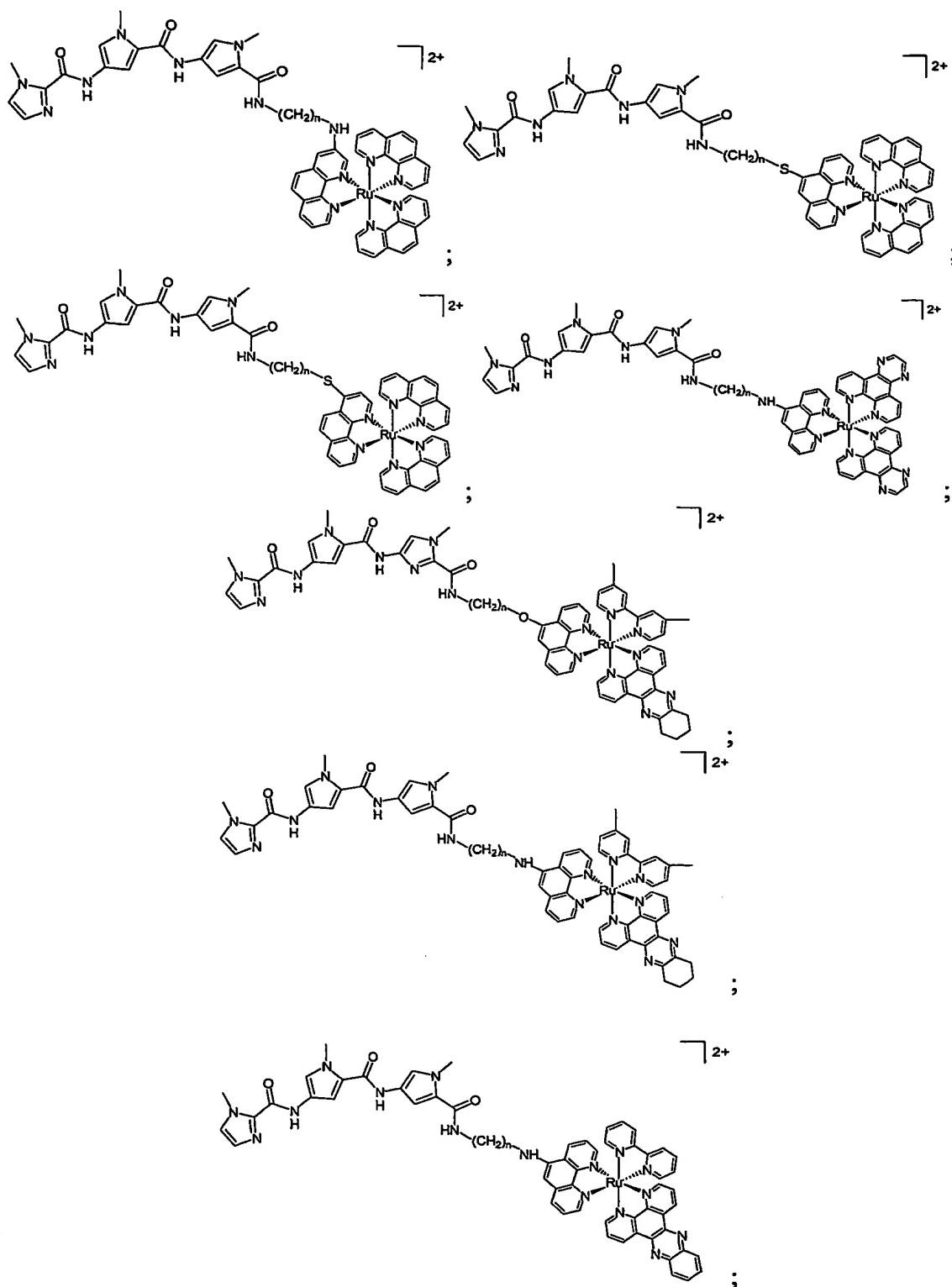


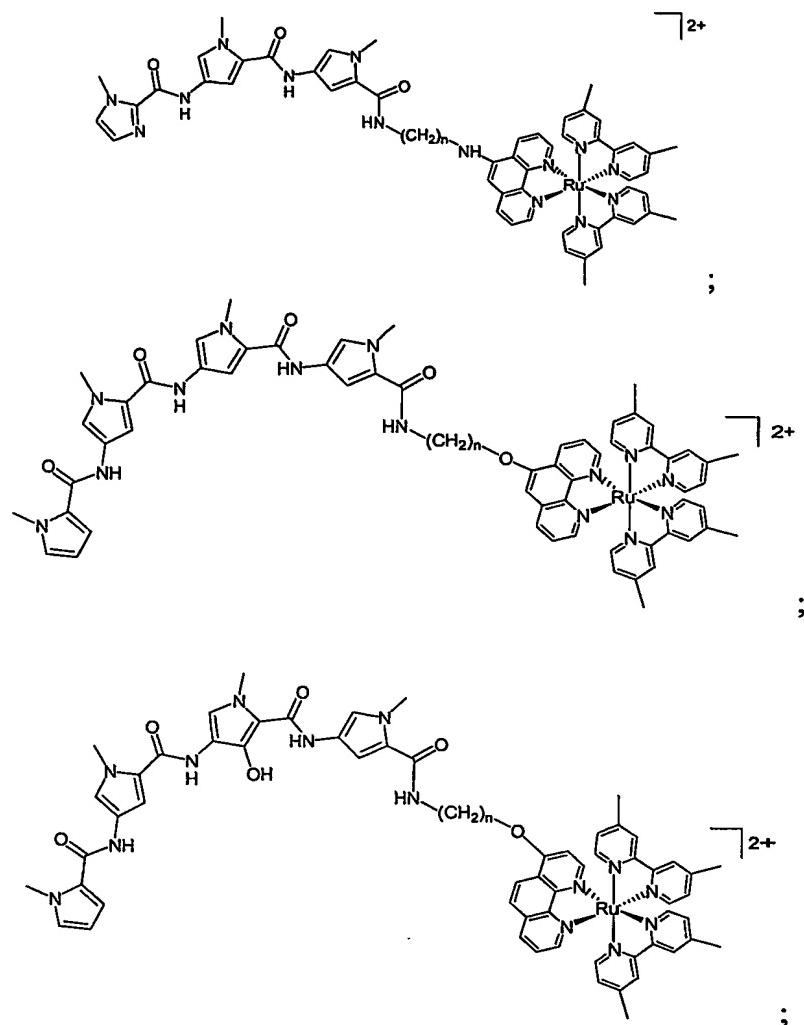
“trans-Im/Py/Py-[CONH(CH₂)₆-NH₂)Pt(NH₃)₂Cl”;



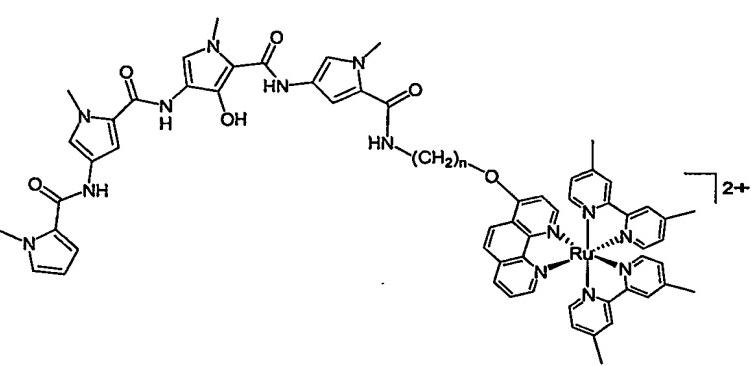
5 “trans-Im/Py/Py-[CONH(CH₂)₂-NH₂)Pt(NH₃)₂Cl”;







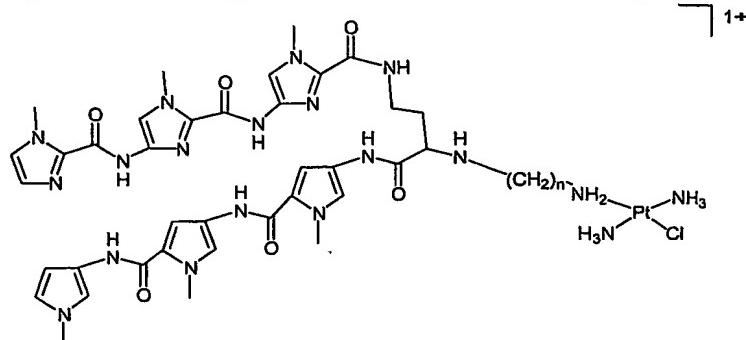
and

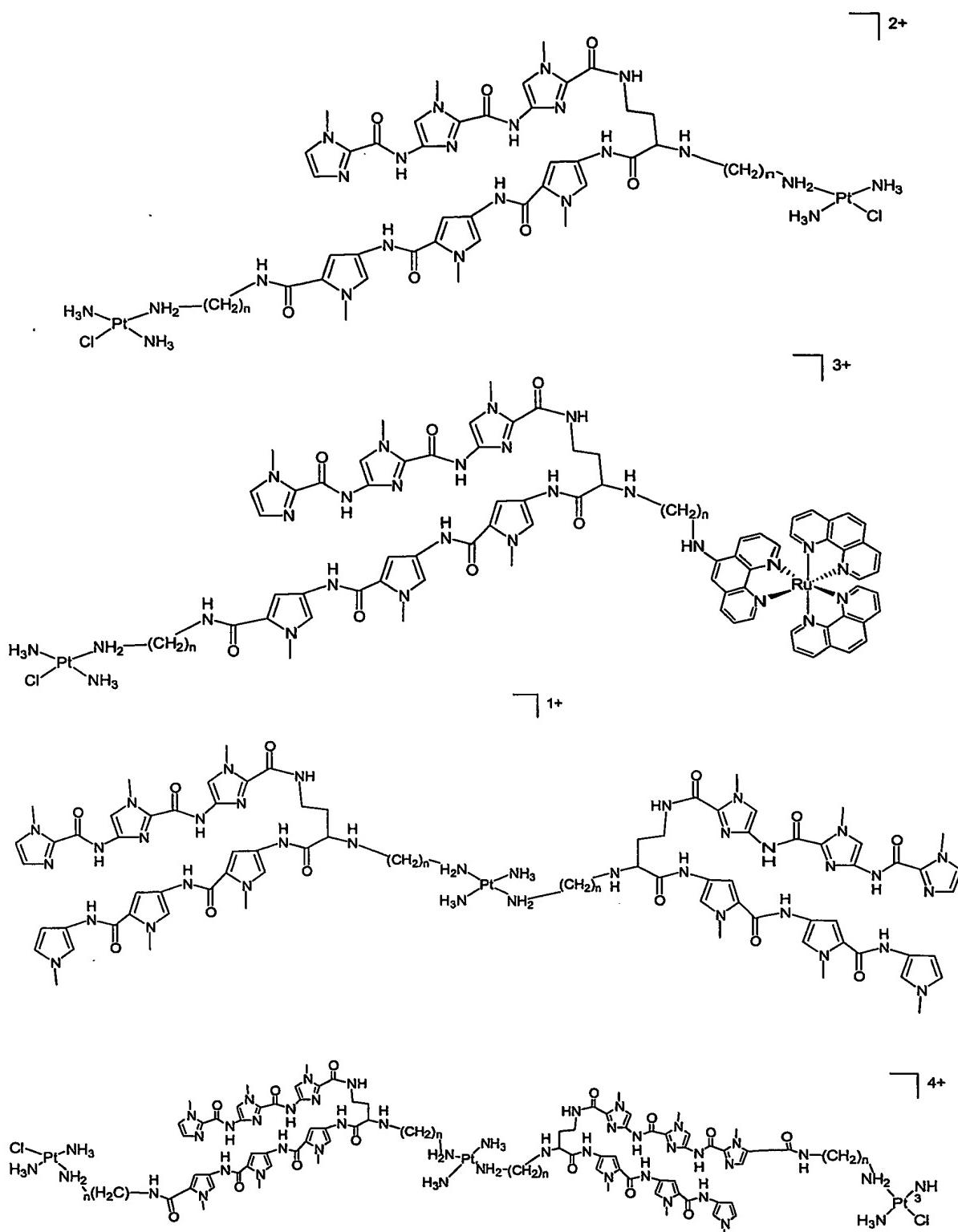


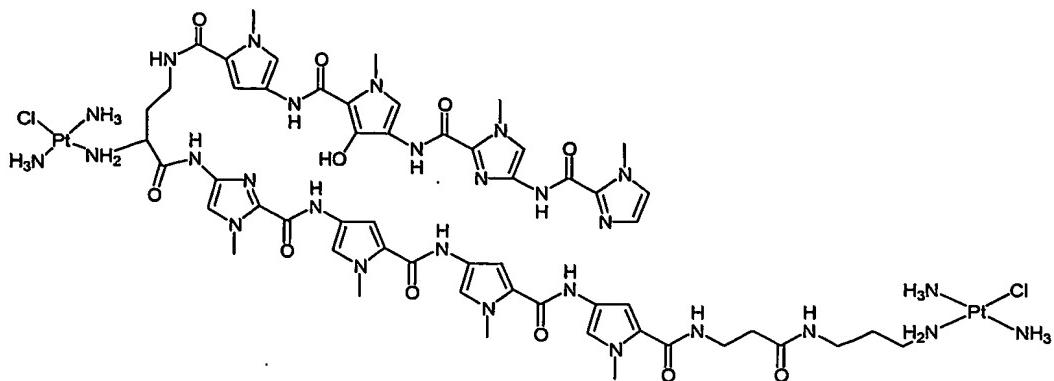
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where n is an integer selected from 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10, or a salt thereof.

15. A compound according to claim 9, wherein said compound is selected from

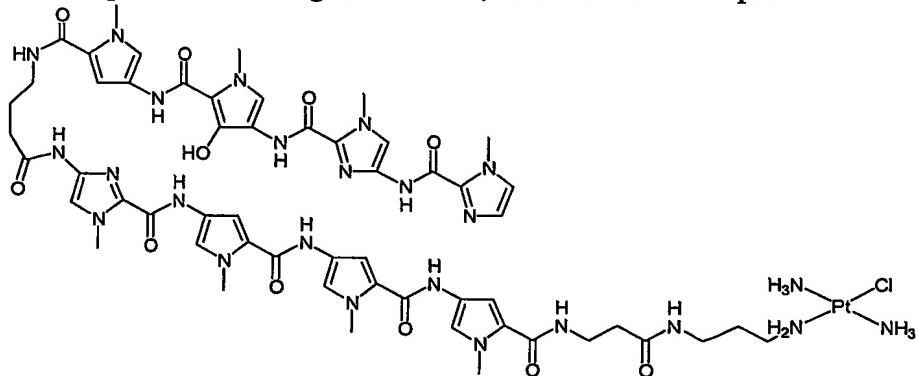






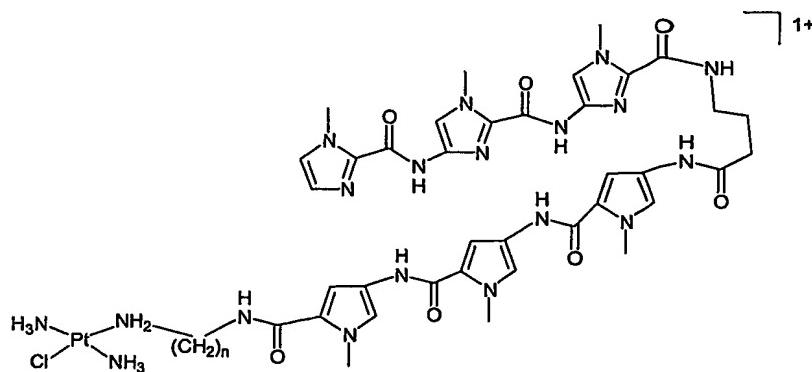
where each n is an integer independently selected from 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10, or a salt thereof.

16. A compound according to claim 13, wherein said compound is selected from



5

and



17. A pharmaceutical composition comprising at least one compound selected
10 from a compound of formula (1) according claim 1, a compound of formula (3) according
to claim 9, and a compound of formula (5) according to claim 13, together with a
pharmaceutically acceptable diluent, adjuvant or carrier.

18. A method of targeting a therapeutic agent(s) and/or a reporter group(s) to a sequence in a polynucleotide comprising contacting biological material suspected of containing said sequence with a compound of formula (1), formula (3) or formula (5).

19. A method of treating a disease selected from cancer, HIV and Hepatitis C,
5 said method comprising administering to a mammal in need of such treatment a therapeutically effective amount of at least one compound according to claim 1, claim 9 or claim 13, or a pharmaceutical composition according to claim 17.

20. A method of diagnosis comprising contacting a biological sample with a diagnostically effective amount of at least one compound according to claim 1, claim 9 or
10 claim 13, or a pharmaceutical composition according to claim 17.